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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/099,615 | 03/15/2002 | Munmaya K. Mishra | EP-7551 | 4344 |

7590 06/09/2003
Ethyl Corporation
330 South Fourth Street
Richmond, VA 23219

EXAMINER

NUTTER, NATHAN M

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| ART UNIT | PAPER NUMBER |
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1711

DATE MAILED: 06/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/099,615

Applicant(s)

MISHRA ET AL.

Examiner

Nathan M. Nutter

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) 6 and 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 and 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-4, drawn to a polymer blend, classified in class 525, subclass 240.
- II. Claim 5, drawn to a lubricating oil composition, classified in class 524, subclass 313.
- III. Claim 6, drawn to an automotive engine, classified in class 180, subclasses 302+.
- IV. Claim 7, drawn to a method for improving the viscosity index of a lubricating oil, classified in class 252, subclass 47.5+.

The inventions are distinct, each from the other because:

Inventions of Group I and of Group II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a molding or coating composition and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if

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the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Inventions of Groups II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different functions, e.g., Group II is used as a lubricant and Group III is used to propel a vehicle or other moving accessory, and they produce different effects.

Inventions of Group I and of Group IV are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the process can be practiced with another materially different product, such as viscosity modifiers known in the art.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

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During a telephone conversation with Dennis H. Rainear on 2 June 2003 a provisional election was made without traverse to prosecute the invention of Group II, claim 5. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-4, 6 and 7 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Due to the art found while searching, the restriction requirement, as regards Group I, claims 1-4, and Group II, claim 5, will be removed. Claims 1-5 are being examined herewith. Claims 6 and 7 are hereby expressly withdrawn from consideration.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1-5 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Olivier et al ('617), cited by applicants, or Olivier et al ('630), ('636) or ('773), all newly cited.

The patents to Olivier et al all teach the production of a polymer blend of an amorphous low ethylene content ethylene-propylene copolymer having a molecular weight distribution within the range of about 1.3 to about 5, an ethylene to propylene mole ratio within the range of 35/65 to 65/35 and a number average molecular weight within the range of 40,000 to about 300,000 with a partially crystalline higher ethylene content ethylene-propylene copolymer having a molecular weight distribution within the range of about 1.3 to about 5, an ethylene to propylene mole ratio within the range of 65/35 to 85/15, 3-25 weight percent crystallinity and a number average molecular weight within the range of 40,000 to about 300,000 whereby the blending is carried out simultaneously with shearing, as herein claimed. The blends are taught as viscosity improvers for lubricating oils. In Olivier et al ('617), note the Abstract, column 5 (line 46) to column 6 (line 56), column 8 (lines 28-54), column 10 (lines 16-48) and the claims. In Olivier et al ('630), note the Abstract, column 5 (line 51) to column 6 (line 60), column 8 (lines 31-57), column 10 (lines 21-50) and the claims. In Olivier et al ('636), note the Abstract, column 5 (line 51) to column 6 (line 60), column 8 (lines 31-57), column 10 (lines 17-50) and the examples. In Olivier et al ('773), note the Abstract, column 9 (line 29) to column 11 (line 15), column 12 (lines 1-26), column 13 (line 52) to column 14 (line 14) and the claims.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan M. Nutter whose telephone number is 703-308-2443. The examiner can normally be reached on Monday-Friday 9:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 703-308-2462. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

A handwritten signature in black ink, reading "Nathan M. Nutter". The signature is written in a cursive, flowing style with a large initial "N" and "M".

Nathan M. Nutter
Primary Examiner
Art Unit 1711

nmn
June 5, 2003